

ABSTRACT OF THE DISCLOSURE

Disclosed is a two-fiber optical ring network having a plurality of nodes linked by first and second fiber optic links, wherein each node comprises a first splitting section for
5 splitting optical signals from optical signals traveling through the first fiber into the protection channels; a first add/drop section for performing adding and/or dropping optical signals passing through the first splitting section to a plurality of channels; a first switching section for combining optical signals in the protection channels to the first fiber when there is no link failure between adjacent nodes and for combining optical signals in the protection
10 channels to the second fiber when there is a link failure between adjacent nodes; and, a controlling section for identifying whether or not the optical link failure occurs in the fibers and for generating a control signal to activate a restoration process according to the identified outcome.